# WAS SOLOMON'S PALACE IN JERUSALEM MODELLED ON EGYPTIAN PALACES?

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## Abstract

In addition to the Temple compound, which is described extensively and in detail (I Kings, 6, 7), Solomon's construction projects in Jerusalem included the palace compound, whose area was much greater than that of the Temple, but whose components — five buildings and two courtyards — are devoted a mere eleven verses in the biblical text (I Kings 7:2–12). This extensive study examines the possibility that the buildings of Solomon's palace were modelled on Egyptian equivalents.

According to I Kings 7: 2–12, the palace comprised two pillared halls. A thorough examination of ancient palaces uncovered in the ancient Near East reveals that this type of palace existed only in Egypt from the beginning of the New Kingdom (ca. 1550 BCE) to the late Ptolemaic period (first century BCE). Typically, the first of these halls was large, and the second one smaller — as is the case here. The dimension figures provided by the biblical text of the two buildings — known as 'The House of the Forest of Lebanon' and 'The Hall of Pillars' — also suggest a design based on sacred Egyptian mathematics. The biblical description of

Solomon's political marriage to an Egyptian princess is further evidence that the author's primary point of reference was Egypt rather than one of the kingdoms to the north.

#### 1. Background

In addition to the Temple compound, which is described extensively and in detail (I Kings, 6, 7), Solomon's construction projects in Jerusalem included the palace compound, whose area was much greater than that of the Temple, but whose components – five buildings and two courtyards – are devoted a mere eleven verses in the biblical text (I Kings 7:2-12).1) They include the 'house of the forest of Lebanon' (HFL) and the 'porch of pillars' (PoP). These two buildings, according to the description, are halls of columns, whose precise purpose is still unclear. The parallels between these two halls and similar halls of columns in the royal buildings in other parts of the ancient world have yet to be studied.

Little research has been carried out specifically about the design influences behind Solomon's palace compound. The first to attempt to compare it to other large complexes was Otto Thenius, in an article written in 1848.<sup>2</sup>) Thenius had already noted then the similarities between the palace compound as described in the biblical text to Egyptian temples, but did so by stating this with just a single sentence and an illustration in which he compared Solomon's palace compound with a temple built by Ramesses III at Medinet Habu (Fig. 1).

The Hebrew *Biblical Encyclopedia*, in an editorial entry, suggests that the HFL served as an entrance hall to a cluster of buildings that included the King's Palace, and formally was inspired by those of Ramesses II in Karnak.<sup>3</sup>)

Cogan suggests that the palace buildings were constructed in the bit hilani style – an entrance hall with columns leading to several halls and an open courtyard surrounded by small rooms - like the buildings at Megiddo and Zingirli. In his view, there were only two buildings in Solomon's compound: the HFL, and the palace.<sup>4</sup>)

Ussishkin speculates that Solomon's palace compound was modelled on the neo-Hittite palaces of the bit hilani style, and was divided into two separate buildings: the HFL (which he believed to be an important building in its own right), and the remaining palace buildings, built as a single unit.<sup>5</sup>) We shall examine Ussishkin's proposal more closely further below.

Busink rejects the comparison between the HFL and the palace uncovered at the Altintepe in Turkey, on chronological grounds. He believes that the HFL bears an Egyptian influence.6)

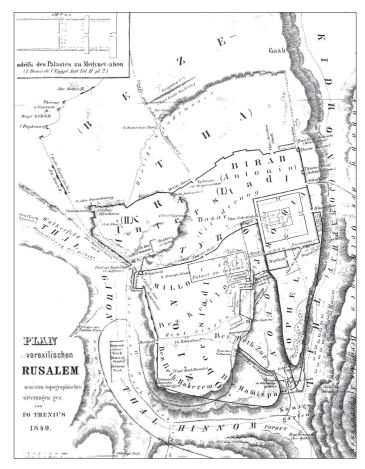


Fig. 1: The proposed reconstruction of the palace and temple compounds in Jerusalem (from: Thenius, Das Vorexilische Jerusalem, p. 46).

Gray sees a similarity between Solomon's palace buildings and palaces uncovered in other parts of the Near East, such as the Amorite palace discovered by Parrot at Mari, and the palaces in Nineveh, Babylon, Alalah, and Ras Shamrah.<sup>7</sup>)

Matthiae suggests that the palace compound be compared to the design of palaces of ancient Egypt. We shall return to examine this suggestion more closely later, as well.8)

In the comparatively little research that has been carried out on this point, it is clear that researchers and biblical commentators have diverse views as to the originality of the palace compound, and whether it exhibits a more northern influence, or an Egyptian one.9)

<sup>1)</sup> This paper is based on a chapter of a doctoral dissertation under the supervision of Prof. Avigdor Hurovitz z" l of Ben-Gurion University, Prof. Nili Shupak of University of Haifa, and Dr. David Gil'ad of Ben-Gurion University – my thanks to all of them for their great help. My profound thanks also to Dr. Danel Kahn and Dr. Yossi Mizrahi of University of Haifa for their cogent and very helpful comments.

Thenius, O., Das Vorexilische Jerusalem und dessen Tempel, Leip-

zig, 1848, p.46.

3) The Biblical Encyclopedia 1954, vol 2, p 80 (entry 'forest of the house of Lebanon')

<sup>4)</sup> Cogan, M., 1 Kings: A New Translation with Introduction and Commentary, New York, 1964.

<sup>5)</sup> Ussishkin, D., 'King Solomon's Palace and Building 1723 in Megiddo', *IEJ* 16, (1966), pp. 174–186.

Busink, T. A., Der Tempel von Jerusalem, Leiden, 1970, p. 139.

<sup>7)</sup> Gray, J., 1 & 2 Kings: A Commentary, 2<sup>nd</sup> ed., London, 1970. See references there to the various excavations.

<sup>8)</sup> Matthiae, P., 'Some Notes about Solomon's Palace and Ramesside Architectural Culture', L'impero Ramesside: Convengo Internationale in Onore Sergio Donadoni, Roma, 1997, pp. 117-130.

Studies that discuss Solomon's palace complex include: 'House of the Forest of Lebanon', Biblical Encyclopedia, 1975 vol. II, pp 81–82; World Bible I Kings; Josephus, Antiquities Book 8 §130-140; Burney, M.A, Books of Kings, Oxford, 1903; Slotki, I.W. Kings: Hebrew Text & English Translation with an Introduction and Commentary, London, 1950; Montgomery and Gehman, A Critical and Exegetical Commentary on the Book of Kings, New York, 1951; Cogan, M., I Kings, A New Translation with Introduction and Commentary, New York, 1964; Busink, T. A., Der Tempel von Jerusalem, Leiden, 1970, pp. 128-161; Mulder, M.J. 1 Kings,

#### 2. The palace compound according to the biblical text

According to the Old Testament, King Solomon began his construction enterprises in the fourth year of his reign. The Temple's construction went on for seven years (I Kings 6:38), and the king's 'own house' required another thirteen (ibid., 7:1).<sup>10</sup>)

The five buildings of the palace compound, in the order of their appearance in the biblical text, are as follows:<sup>11</sup>)

The 'house of the forest of Lebanon' (I Kings 7:2-5)

The 'house of the forest of Lebanon' (HFL) is the largest of all the buildings that Solomon built, according to the text - greater even then the House of the Lord (the Temple). It is also the only one of the palace buildings to be described in detail, although the description is somewhat obscure, notwithstanding the four verses devoted to it. For our purpose, the important questions are: What purpose did the HFL serve?; Were there three or four rows of columns?; How many columns were there in total? What does the expression 'and light was against light' (7:5) mean?

I Kings states the dimensions of the HFL – 100 cubits long, 50 cubits wide, 30 cubits high – but not its purpose. According to the Septuagint<sup>12</sup>) and traditional commentators, including Rashi and Kimhi, it served as Solomon's summer palace, 'built in a forest known in Israel at a time as the Lebanon Forest' – but this interpretation is at odds with references to the building elsewhere, where it is clear that it is not separate from the palace compound (I Kings 10:17, 21; Isaiah 22:8). Josephus believed that it was meant for audiences with the King and for judicial hearings. 13) Cogan also thought that it was too imposing to serve as an armoury, and that it may have served for public audiences with the King.<sup>14</sup>) Fritz points to known parallels to the building throughout the Syrian/Canaanite region, and raises the possibility that it was meant as an antechamber for court officials.<sup>15</sup>)

Leuven, 1998; Ussishkin, D., "King Solomon's Palace", BA 36/3 (1973), pp. 78-105; Gray, J., 1 & 2 Kings A Commentary, 2nd edition, London, 1970; Kitchen, K., On the Reliability of the Old Testament, Cambridge, 2003, pp.127-131; Fritz, V., 1 & 2 Kings, Hagedom, A. (trans.), 1st English Language ed. Minneapolis, 2003; Keel, O., Die Geschichte Jerusalems und die Entstehung des Monotheismus, Gottingen, 2007, pp. 247-254.

<sup>11</sup>) The description of the building in these verses is difficult and given to many interpretations. In this paper I shall put forward a particular interpretation and reconstruction of the 'house of the forest of Lebanon and other buildings cited in vv. 2-12.

The belief by some researchers that the HFL served as an armoury is implausible for two reasons: 1) according to I Kings 10:16-17, Solomon ordered 'two hundred targets [... and] three hundred shields of beaten gold' to be brought to the HFL. Shields of solid gold are unsuited for combat, and therefore were likely only for show at grand royal occasions; and 2) there were too few of them. The more likely hypothesis is that this grand building served mainly for administrative purposes – such as an entrance hall to the palace for the benefit of those granted an audience with the King, who sat in the Throne Room.

Another of the questions regarding the HFL is how many columns did it have? The ceiling is said to have been supported by four rows of columns. These were made of cedar and were specially imported from the Lebanon - hence the hall's name. Although the Old Testament explicitly states there were four rows of columns, the Septuagint thought there were three, and as a consequence so, too, did some researchers. However, it is now generally accepted that there were four rows, and that the Septuagint's error was due to a misreading of the text: apparently they thought that the words 'lay on forty and five pillars' referred to the total number of columns – and since 45 cannot be divided by four, they concluded that it must have been three rows. Busink and Benzinger similarly believed that there were forty-five columns, fifteen in each row (Figs. 2, 3). However, a closer reading of this verse reveals that the number 45 refers not to the number of columns, but to the number of beams supporting the building's roof: 'And it was covered with cedar above upon the beams, that lay on forty five pillars, fifteen in a row' (I Kings 7:3).16) Therefore, we should accept the Masoretic text at face value, namely that there were four rows, and since there is no information regarding the precise number of columns, we can only conjecture as to their number. I believe, like Kitchen, that there were thirty-two columns in total (four rows of eight columns each<sup>17</sup>) – see reconstruction of the HFL in Fig. 4 below, and the explanation there, note 1). From the text it is also not clear whether the two outer rows of columns formed part of the external wall (Mongomery, Gray), thereby creating two rows of freestanding columns and three aisles of identical width – or whether they, too, were free-standing, which meant there were five aisles in total (Fritz).

In the view of Busink and Benzinger, the HFL was oriented with its entrance and exit situated at the middle of the long side, mainly because they see it as a standalone building in its own right. However, as we shall see, the HFL was inextricably linked to the adjoining halls of the PoP (whose width, at fifty cubits, matched that of the HFL), and the Throne Room beyond.

Commentators are divided over the explanation of v 4: 'And there were windows in three rows, and light was against

<sup>&</sup>lt;sup>10</sup>) These numbers, I should note, are typological and presented in a literary context and therefore difficult to link to any historical evidence. However, this study does not presume to intervene in the ongoing dispute between archaeologists and biblical scholars as to the authenticity of the biblical description of Solomon's reign and his enterprises, as fascinating as it may be. Rather, the purpose of this study is to gain a full understanding of the biblical text - in particular, King Solomon's construction projects (I Kings 6, 7) and the author's possible religious architectural sources of inspiration, rather than to establish its historical veracity. Naturally, it will, from time to time, touch upon this and its conclusions regarding the biblical text's sources of inspiration may even bear upon the archaeological and historical debate – however, that is neither the study's premise, nor its purpose. It aims only to understand the biblical text, not to validate it.

<sup>&</sup>lt;sup>12</sup>) Based on the translation by Haim Shelli, The Septuagint Translation of the Early Prophets, The Society of Biblical Research, Tel-Aviv, 1983 (Hebrew). On this particular passage, Shelli notes that perhaps the meaning

was 'from the trees of the forest'.

13) War of the Jews, Book 8, §133, Avraham Shalit (transl.), 9<sup>th</sup> ed., 2002, p. 280.

Cogan, I Kings, A New Translation, 254.
 Fritz, V., Tempel und Zelt: Studien zum Tempelbau in Israel und zu dem Zeltheiligtum der Priesterschrift, Neukirchen-Vluyn, 1977, p. 77.

<sup>&</sup>lt;sup>16</sup>) Fritz, *ibid*, p.77.

<sup>17)</sup> In all its occurrences in the Hebrew Bible, the word יכם -safun ('covered') is used in the sense of a ceiling cladding, while the word צפה tzipah is used to mean surfacing of a floor, wall, or of tools. The former appears six times in the Hebrew Bible: four times in the sense of a cladding, three of which are in relation to the Temple (I Kings 6:9; 7:3, 7), and one in Jeremiah (22:14); and twice in the sense of 'concealed' (Deut. 33:21; Haggai 1:4). Both expressions represent an action of covering, however in all four occurrences of the verb safun, it refers to the covering of a roof, while the covering of walls, floors and various artefacts (the altar, the doors, the cherubs), the word tzipah is used.

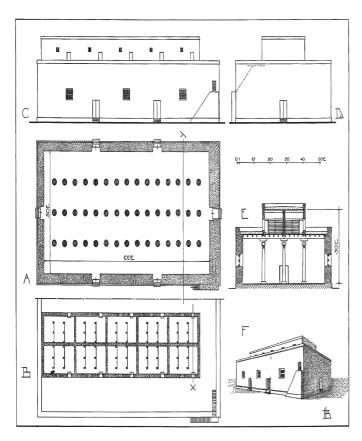


Fig. 2: Busink's reconstruction of the 'house of the forest of Lebanon' (from: Busink, *Der Tempel von Jerusalem*, p. 132-135).

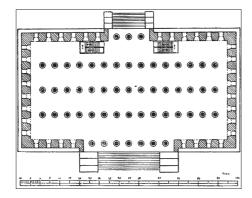


Fig. 3: Benzinger's reconstruction of the 'house of the forest of Lebanon' (from: Busink, *Der Tempel von Jerusalem*, p. 135).

light in three ranks'. Some believe that this is a reference to a type of window (Cogan, Fritz, Montgomery) – i.e., three windows on each side of the building, facing each other so that one may see through them to the other side of the building. Others believe that it refers to openings at either end of the building (Busink, Septuagint). It is difficult to say which of these two interpretations is correct, however I believe that if the author had intended it to mean windows, he would have said so explicitly, as he did when describing the Temple building (6:4). If we accept that there were three aisles, then each of these would have had openings at either end of the

building (one for the entrance, and the other for the exit or passage to the adjacent building); thus, 'and light was against light in three ranks' refers to openings rather than to windows. However it is also possible that both interpretations are correct, in that v 4 refers to windows, and v 5 refers to openings.

In light of the above, my interpretation of the HFL, based on the biblical account, is as follows (see Fig. 4):

1. The HFL was a long building, a hundred cubits in length and fifty cubits wide, 30 cubits high, and was the first one a visitor encountered on entering the palace compound, before moving on to the other halls. The four rows of columns that ran along its length formed three aisles, at the end of which were openings. Assuming the division into three aisles was uniform, and that the outer (side) columns formed part of the external wall, the distance between each row of columns was 16.66 cubits (based on the 'royal cubit' = 0.525 cm, i.e., approximately 8.75 metres).

However, it is more likely that the two outer rows were set back slightly from the external wall (approximately 5 cubits?),<sup>18</sup>) since otherwise they would not have been considered a row, but as part of the wall. Therefore the two outer aisles were narrower than the central one, measuring (by my estimation) approximately eleven cubits wide each. As we shall presently see, in similar halls of columns in Egyptian palaces of that period, the central aisle – the 'nave', as it were – was wider than the two side aisles. Another good example of this is the Hall of Columns in the Phoenician temple of Kition (Fig. 8 below). Assuming the spacing between columns along the building's width was the same as along its long axis, and since the length of the building was twice that of its width, then the hall would have contained eight columns along its width, spaced 16.66 cubits apart from one another – bringing the total number of columns in the HFL to thirty two.

- 2. Placed on top of the columns were lateral cedar beams or joists, that served as supports for the roof rafters that ran lengthwise (v 2), creating square-shaped 'rib frames' (v 2), that ran in three rows along the length of the building.
- 3. Forty-five beams ran the full length of the building (these were not hundred cubits long each, but consisted of sequences of beams joined together. These accommodated the entire roof, with over 15 beams over each row. Based on the width of the entire building and the number of beams, each beam appears to have been approximately 1.11 cubits wide, in accordance with the verse: 'And it was covered with cedar above upon the beams, that lay on forty five pillars, fifteen in a row' (I Kings 7:3). (The word 'row' in this verse refers to the square rib frames, rather than the rows of columns.<sup>19</sup>)
- 4. In each of the three aisles there were openings at either end ('and there were windows in three rows, and light was against light in three ranks' 7:4; 'And all the doors and

<sup>&</sup>lt;sup>18</sup>) This dimension is a guesstimate, and other reasonable interpretations are equally likely. However, based on similar buildings in Egypt and Cyprus, I believe the central aisle was wider, as I shall explain in greater detail below.

<sup>&</sup>lt;sup>19</sup>) The word *tur* ('row') in the Hebrew Bible refers not to an object of some sort, but to the arrangement of several objects in a row. The word occurs in three contexts: the precious stones set in the priestly *ephod* (Exodus 28:6-39—); the perimeter of the palace inner court (I Kings 6:36) and great court ('three rows of hewed stones, and a row of cedar beams' – I Kings 7:12); and in Ezekiel 46:23.

posts were square, with the windows: and light was against *light in three ranks'* -7:5). The reference to 'all the doors' suggests that there was more than one opening; 'light was against light' indicates that there were three aisles and six openings – three on either side of the aisle – such that each opening had a counterpart at the other end. The frame for each opening consisted of four frames of increasing depth, creating a stepped appearance.

In light of all the above, my reconstruction of the HFL is as follows:

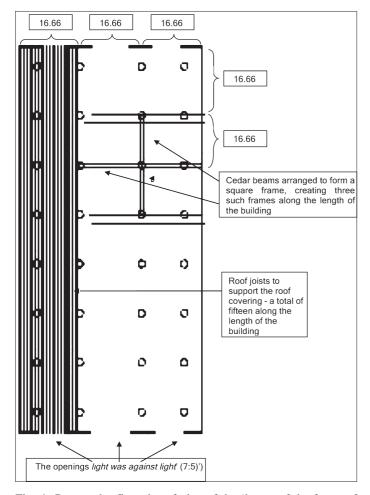


Fig. 4: Proposed reflected roof plan of the 'house of the forest of Lebanon'.

## The 'porch of pillars' (I Kings 7:6)

The PoP (in Hebrew, ulam ha'amudim - 'the hall of pillars') appears in the text after the HFL. Here, too, the number of columns is not stated, but given the building's name, it was presumably not insignificant. The material from which the columns were made is also not mentioned, but may have been brass (based on the Septuagint – see below). The hall measured 50 cubits long by thirty cubits wide. The fact that its length matched the width of the HFL, and the height of the PoP was not given, suggests that the two buildings were possibly joined together by a common wall.<sup>20</sup>)

The text does not specify what purpose this hall served, either. Slotki argues that the fact that its description is immediately followed by that of the Throne Room suggests that the PoP served as an antechamber for those seeking an audience with the king.<sup>21</sup>) Gray cites Klostermann, who argues that its name may have been the result of a copying error in the original Hebrew, such that it was not a hall of 'pillars' (amudim), but of people queuing up (omdim) waiting for the term to enter the Throne Room (a view shared by Benzinger and Montgomery)<sup>22</sup>) – however, there is no evidence to support this in other sources in the Hebrew Bible. That said, it may well have served as a waiting chamber, with an impressive exedra or portico of columns to serve those waiting to appear before the king. Josephus describes the PoP and the Throne Room as a single unit attached to the HFL, with a gallery supported by thick columns.<sup>23</sup>) In Busink's view, it is unlikely that a hall of this size (approximately  $25 \times 15$  m) served merely as a waiting chamber, but more likely served as a Throne Room as well. He points out that Throne Rooms in other palaces in the region were of similar dimensions, and judging from the second half of v. 6 ('and the other pillars and the thick beam were before them'), the Throne Room had a vestibule.<sup>24</sup>) However, Mulder disputes this, and believes that it means that these were two separate halls.<sup>25</sup>)

Most commentators have remarked on the apparent disassociation between the two parts of verse 6. The second half of the verse in the Hebrew ('ve'ulam al pneihem ve'amudim ve'av al pneihem') is unclear, and given to many interpretations: does it refer to an additional hall? What is the meaning of the Hebrew word av? Burney points out that the Septuagint inserted the word ἐζυγωμένα ('joined') immediately before the second part, providing the necessary connection between the two halls in the verse.

As for the meaning of the word av, some commentators (Kimhi, Gray, and others, based mainly on Ezek. 41:25), explain that it is derived from the Hebrew word עבה aveh, meaning 'thick', referring, in their view, to the beam lying on top of the columns. The Septuagint suggests it is *skupta*, meaning an stepped entrance (Burney). However, these explanations are neither plausible, nor do they help to clarify the picture with regard to the PoP. Cogan proposes an interesting interpretation of the phrase ve'amudim ve'av al pneihem', whereby the second half of the verse and its relationship to the building may be understood. In his view, the word av means a 'dome' or 'canopy' - in other words there was another hall with columns that supported a dome. If that is true, then the verse may have a different reading, with the second half of the verse referring to the Throne Room mentioned in the following verse (7:7), so that the expression means that the throne sat beneath a posted canopy. This would be consistent with the archaeological findings: the thrones of the kings of Egypt were placed beneath such a

<sup>&</sup>lt;sup>20</sup>) Noth interprets the two halls in vv. 6 & 7 as an entrance portico of the HFL, since, in his view, there would be no reason for it to be a hall in its own right (BK IX/1, 132.137f.). Conversely, Busink thinks that the PoP

in v. 6 was an independent building, but believes that it was in fact the Throne Room mentioned in v. 7, whose dimensions are not stated – on the grounds that its purpose is not stated (Busink, Der Tempel, 140).

<sup>&</sup>lt;sup>21</sup>) Slotki, I. W., Kings: Hebrew Text & English Translation with an Introduction and Commentary, London, 1950.

<sup>&</sup>lt;sup>22</sup>) Mulder, M. J., *1 Kings*, Leuven, 1998, p. 292.

<sup>&</sup>lt;sup>23</sup>) *War of the Jews*, Book 8, §134.

<sup>&</sup>lt;sup>24</sup>) Busink, Der Tempel, 140.

<sup>&</sup>lt;sup>25</sup>) Mulder, 1 Kings, 293.

canopy, supported that was held aloft by four columns, such as that of Tutankhamen (see Fig. 5).<sup>26</sup>)

Accordingly, my suggestion for a new reading of vv 7:6-7 is as follows:

[6] And he made a porch of pillars; the length thereof was fifty cubits, and the breadth thereof thirty cubits:

[7] and [adjoining it a hall with] a porch and pillars and a canopy – being the Throne Room where he might judge, even the porch of judgment [...]

The Throne Room – 'where he might judge' (I Kings 7:7)

The text notes that it also served for judicial hearings, but more likely it was where the King sat to conduct matters of state (Gray, Fritz, Mulder, Slotki, Cogan and others). Kimhi noted the duplication, and explains that the 'porch of judgement' was just another term for the 'Throne Room'. Josephus, suggested that it was situated within the PoP, and Busink argues that they were one and the same. Both interpretations may be true: in some Egyptian palaces – for example, Amenhotep's palace at Malkata (a residential palace – see Fig. 10) – the Throne Room was separate from the Hall of Columns preceding it, while in others, such as Merenptah's palace at Memphis (a ceremonial and administrative palace – see Fig. 11), the throne appears to have been situated in the Hall of Pillars.

Bruner shows that the uniqueness of the Egyptian kings' throne was that it was placed on a sloping platform, symbolizing the hieroglyph for Maat, the goddess of justice and cosmic order, and that appears to resemble the description of Solomon's throne.<sup>27</sup>) In his view, Solomon's throne was inspired by Egyptian ideas, one of which is the notion that it is founded on justice. Next to the armrests were sculptures of lions and six steps – both Egyptian motifs. The hieroglyph representing the goddess Maat and the Egyptian throne based on it describes the primordial hill from which God created the divine order.<sup>28</sup>) When the Israelites copied the throne design, they left out the concept of the primordial hill but did adopt the ideas of justice and truth. He adds that this description also matches the archaeological finding a Ugarit throne that was similarly modelled after its Egyptian counterparts.<sup>29</sup>)

#### Residences

And his house where he dwelt had another court within the porch, which was of the like work. Solomon made also an house for Pharaoh's daughter, whom he had taken to wife, like unto this porch. (I Kings 7:8)

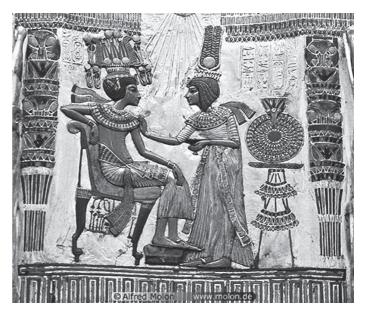


Fig. 5: King Tutankhamen and his queen; detail from a throne found in the king's tomb (Egyptian Museum, Cairo).

This verse describes the residential wing of the King and Queen's Palace. There is no description of the inner sections of the buildings, which undoubtedly also existed to serve the needs of the king and queen – such as kitchen, bathrooms, bedrooms, servant's quarters, etc. Josephus, however, noted that there were likely additional rooms for eating and recreation.<sup>30</sup>) Fritz also argues that, like Palace #1723 at Megiddo of the 10th century BCE – apparently also built by King Solomon – there were possibly many rooms in the residential wing, surrounding one or more courtyards. Fritz also notes that the building's design may have been influenced by Egyptian architecture.<sup>31</sup>)

The description of the two residential quarters is extremely brief,<sup>32</sup>) but the text does give us one important clue: 'his house where he dwelt had another court within the porch, which was of the like work', and the house for Pharaoh's daughter was 'like unto this porch'. In other words, they were built along the same engineering/architectural lines as the halls, and therefore were likely linked to one another, and possibly even built as a single unit. The reference to 'another court' in this verse is possibly what separated the Throne Room from the King's quarters and perhaps those of the Queen as well.

How many columns in the palace compound?

The Masoretic text suggests that the HFL had cedar columns, but their number is not specified, and commentators are divided as to what this might be. The text also does not state the number of columns in the PoP. As we saw earlier, the Septuagint's notion that the HFL contained 45 columns was based on a misunderstanding of the verse. According to my proposed reconstruction, the HFL contains 32 columns.

<sup>&</sup>lt;sup>26</sup>) See Kendall, T., 'The Napatan Palace At Gebel Barakal: A first look at B-1200', *Egypt and Africa, Nubia from pre-History to Islam*, ed. Davies, W.V., London, 1991. A dig at Gebel Barkal in Nubia, led by Timothy Kendall in the temples and palaces compound, which stood from the time of Thutmose III until its abandonment in 270 BCE. Based on the stratagraphical evidence, the compound was built at least four times at the same site. On the floor of the hall marked ASP-1 – serving the audience of King Aspelta (600-580 BCE), where he used to celebrate the New Year, were four sockets for posts that held the type of canopy under which sat the Kings throne. At least three throne rooms were uncovered, all with the same floor sockets. Similar sockets were found in Hall #1233, which also served as a throne room.

<sup>&</sup>lt;sup>27</sup>) Brunner, H., 'Gerechtigkeit als Fundament des Thrones', VT 8, (1958), pp. 426+428.

<sup>&</sup>lt;sup>28</sup>) Gardiner, A., Egyptian Grammar: Being an Introduction to the Study of Hieroglyphs, Oxford, 1957.

<sup>&</sup>lt;sup>29</sup>) Williams, R. J., 'A People come out of Egypt', *VTsup* 28, (1975), pp. 231-252.

<sup>&</sup>lt;sup>30</sup>) *War of the Jews*, Book 8, §134.

<sup>&</sup>lt;sup>31</sup>) Fritz, Tempel und Zelt, 78.

<sup>&</sup>lt;sup>32</sup>) As Matthiae points out, this may have been a Deuteronomistic redaction, in view of Solomon's controversial religious policies, which exposed him to paganist influences by his foreign wives (Matthiae, 'Solomon's Palace', 119)

Although the biblical author does not provide information as to the number of columns in the PoP and other buildings, the Septuagint's rendition of I Kings 7:31, which discusses the brass elements provided by King Hiram, contains an interesting passage that is missing in the Masoretic version:

καὶ τοὺς λέβητας καὶ τὰς θερμάστρεις καὶ τὰς φιάλας καὶ πάντα τὰ σκεύη, ἃ ἐποίησε Χιρὰμ τῷ βασιλεῖ Σαλωμὼν τῷ οἴκῳ Κυρίου υκαὶ οἱ στῦλοι τεσσαράκοντα καὶ ὀκτὰ τοῦ οἴκου τοῦ βασιλέως καὶ τοῦ οἴκου Κυρίου. πάντα τὰ ἔργα τοῦ βασιλέως, ἃ ἐποίησε Χιράμ, χαλκᾶ ἄρδην ('And the cauldrons, and pans, and bowls, and all the furniture, which Hiram made for king Solomon for the house of the Lord: and [there were] eight and forty pillars of the house of the king and of the house of the Lord: all the works of the king which Hiram made were entirely of brass.')

Since the Septuagint likely did not invent this information, it appears to originate from a Hebrew source that was later omitted for some reason, or purposely removed by a later editor (according to Hurowitz, because it was a homeoteleuton). If indeed the missing text in the Masoretic version was in the original account, they provide important information about the number of brass columns in the palace and Temple compound: since we know of only two brass columns in the Temple itself – the famous 'Jachin' and 'Boaz' – the remaining forty-six columns must have been in the palace compound; and since these were the work of King Hiram's craftsmen, it follows that these columns are not included in the account of the cedar columns in the HFL, and therefore these columns must be the ones in the PoP (v 6) or in the other buildings in the palace compound, such as the king's 'own house', which was built 'of the like work', or in the house of Pharaoh's daughter, which was also 'like unto this porch'.

In summary, Solomon's palace compound in Jerusalem most likely contained at least thirty-two cedar columns (by my calculation), and another forty-six brass columns produced by King Hiram (according to the Septuagint), making a total of at least seventy- eight columns.

The palace buildings as a single construction complex

The description in I Kings 7:2-12 suggests a closed compound in which all the buildings were linked together to form a single construction complex. Presumably, the arrangement of these buildings matched the description into text, namely: at the entrance to the palace compound through the large hall of columns is the 'house of the forest of Lebanon'. Through it one moved on to the 'porch of pillars', at the end of which lay the Throne Room, where the king sat in judgement of his people and received his subjects. At the rear of the palace lay the king and queen's residential quarters, separated from the Throne Room by the other courtyard. The hypothesis that the palace compound was built as a single complex is based on the following arguments:

1. The structure of the text as a whole suggests a compound built as a single entity. Verse 1 begins with the declaration: 'But Solomon was building his own house thirteen years, and he finished all his house', followed by vv 2-12 that detail all that it contained. In other words, the entire compound, including administrative and residential buildings, was a single complex known as 'his own house'.33) The Septuagint emphasises this by split-

- 2. The biblical term 'the king's house' (I Kings 10:1) describes the entire palace compound, which comprised both administrative and residential structures. If the buildings were set apart from one another and not part of a single complex, the term 'the king's house' would not have been appropriate and a plural form would have been used, instead.
- 3. The dimensions cited in the palace complex construction account relate only to the 'house of the forest of Lebanon' and 'porch of pillars'. However, while three dimensions are given for the former length, breadth and height only the length and breadth are given for the 'porch of pillars': the likely explanation is that it was an extension of the 'house of the forest of Lebanon', and therefore the height specification was not needed. There is no reason to dispute that the three first buildings (the HFL, the PoP and Throne Room) were in fact connected to one another, since if the HFL and PoP had separate and discrete functions, the text would presumably have said as much.
- 4. In the description of the Temple (I Kings 6:3) commentators agree that its 'porch', whose length matched the breadth of the 'house' ('heikhal'), formed a single entity with the latter, along with the devir. It stands to reason, therefore, that the 'porch of pillars', also formed a single entity with the HFL, whose breadth matched its length.
- 5. The two residential wings of the King and Pharaoh's daughter are architecturally similar to the PoP and to the Throne Room being 'of the like work' and 'like unto this porch'. They are both mentioned in the same verse, indicating that they formed part of the same compound. Between the administrative building and the residential quarters stood 'another court', which forms part of the definition of the 'his [the king's] own house'.
- 6. 'And the great court round about' (8:12) encompassed all the buildings previously described, within a single construction complex.

In view of all the above, it seems clear that the biblical author describing the palace buildings saw it as a single construction complex that included all the buildings described in

ting v 1 into two: the first ('But Solomon was building his own house') being repeated (in the Septuagint version) in v 7:38 at the start of the passage describing the construction of the palace, while the second part ('and he finished all his house') is repeated in 7:50 and concludes the entire passage. The HFL was a royal reception hall, as Josephus, Busink and others have suggested, and therefore presumably was also physically attached to the PoP and the visitors' ultimate destination – the Throne Room.<sup>34</sup>) The HFL – despite being called a 'house' rather than a 'hall' - was built not as a separate entity, but as an impressive entrance hall, of the entire complex. Its width matches that of the PoP beyond; its three openings at either end (Fig. 4 above) indicating that it was used as a passage to the PoP. By its very nature, a 'hall' is part of a building, and therefore it is reasonable to assume that the PoP and Throne Room were part of a larger edifice. The emphasis of the term 'house' in the HFL indicated that it incorporated the two halls the PoP and the Throne Room.

<sup>&</sup>lt;sup>33</sup>) Cf. Slotki's interpretation with v. 2: Slotki, Kings,

<sup>&</sup>lt;sup>34</sup>) Busink, Der Tempel, 136; Mulder, 1 Kings, 286.

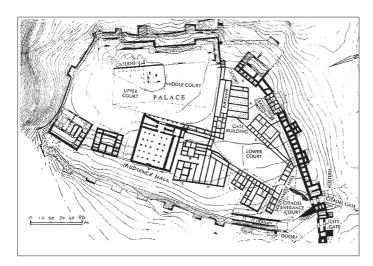


Fig. 6: The Hittite palace at Hattusha (Boghazköy) (from: Kitchen, Reliability of the Old Testament, p. 621).

the text. Furthermore, King Solomon's own residential quarters – his house and that of Pharaoh's daughter, being architecturally related to the PoP and the HFL - were built in similar fashion, so that they, too, featured many columns.

#### 3. Halls of columns in palaces of the ancient East

The two signature buildings of King Solomon's palace were clearly the two halls of columns described above. In searching for parallels for this palace compound we should therefore seek out similar halls of columns in the ancient East. We shall begin first with a survey of the northern palaces, namely those of Mesopotamia, Syria, Anatolia, Phoenicia, and Canaan.

Rudolph Naumann's research on the architecture of buildings in Anatolia and northern Syria provides drawings of several dozen buildings, including palaces, temples, and houses. 35) Of these, only one – the Hittite palace at Hattusha (Boghazköy), destroyed in the thirteenth century BCE – may have contained a hall of columns, which Naumann believed served as a waiting chamber (Fig. 6). Kitchen, who also noted this palace,<sup>36</sup>) agreed that it served as a reception hall, and found that it appeared to contain twenty-five columns in five rows.<sup>37</sup>) However, this palace was destroyed two and half centuries before Solomon's time, and there is no evidence to suggest, according to Kitchen, that the architecture in Canaan in the tenth century BCE was influenced by Hittite architecture in Anatolia.<sup>38</sup>) In any event, that palace had not two halls of columns, but one.

From the late Iron Age, there is a hall of columns at the Urartian citadel of Antintepe, in north-western Anatolia, measuring approximately  $75 \times 47$  m and featuring three rows

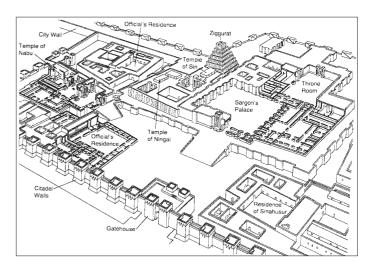


Fig. 7: Reconstruction of Sargon's palace at Hursabad (from: Roaf, Palace & Temple, p. 434).

of columns.<sup>39</sup>) This palace was built sometime between the late 700s and late 600s BCE – long after Solomon's time – and it, too, had only one such hall, whose purpose is unknown.

Jean Claude Margueron notes ten Iron Age palaces found in Assyria and in Babylon. None of these included any halls of columns, their construction being primarily in the bit hilani style (as detailed below).40)

Michael Roaf provides a comprehensive survey of Mesopotamian palaces. It presents a similar picture: two courtyards, separated by a Throne Room. The typical Mesopotamian palace was large and had many rooms - the one at Ashnuna, for example, contained more than 260 rooms over a total area of approximately 1 hectare (2.5 acres). Another example of a highly sophisticated palace was that of Sargon II (717-707 BCE), see Fig. 7. None of these, however, contained columns like their Egyptian counterparts.

In Syria and in Israel, at least nineteen palaces have been uncovered (Tall al-Ajjul, two palaces in Lachish, Tel-Afeq, three in Nablus, five at Megiddo, Area F at Hazor, three at Ebla, three at Alalakh, and the palace at Mari). All were built on an open court plan, and none of them featured a hall of columns.41)

Perhaps the closest analogue to the HFL is the hall of columns of the Phoenician temple of Ashteroth in Kition, Cyprus (Fig. 8) dated to the ninth century BCE.<sup>42</sup>) In the temple uncovered there at stratum #4, measuring approximately  $33 \times 22$  m, stood four rows of stone columns, each containing seven columns, for a total of 28 columns.<sup>43</sup>). At

<sup>&</sup>lt;sup>35</sup>) Naumann, R., Architektur Kleinasiens von ihren Anfängen bis zum Ende der Hethitischen Zeit, Tübingen, 1971, pp. 338-411.

<sup>&</sup>lt;sup>36</sup>) Kitchen, K., On the Reliability of the Old Testament, Cambridge,

<sup>2003,</sup> p. 128.

37) Ibid., and see illustration D20, p. 621; cf. Bittel, K., *Hattusa: The* Capital of the Hittites, New York, 1970, p. 22, illustrations 82-84; and Naumann, Architektur, 411.

<sup>&</sup>lt;sup>38</sup>) Kitchen, Reliability of the Old Testament; cf. Matthiae, Solomon's Temple, p. 124.

<sup>&</sup>lt;sup>39</sup>) Ussishkin, D., 'King Solomon's Palace', BA 36/3, (1973), pp. 92-94, Fig. 8. Cf. Busink, Der Tempel, 139, who believes that this building was influenced by the building in Jerusalem, since it came two centuries later.

<sup>&</sup>lt;sup>40</sup>) Margueron, J. C., 'Temple', in: The Oxford Encyclopedia of Archaeology in the Near East, vol. 4, Oxford, 1997, pp. 197–200.

41) Maralli, A., The Court Palace in the Middle and Late Bronze

Age, Master's thesis, Ben-Gurion University, Department of Bible and

Age, Master Studies, 2002.

42) See Davey, C., 'Temple of the Levant and the Building of Solomon', TB 31, (1980), pp. 107–146.

43) According to Karageorghis, this temple was built on the ruins of

an earlier temple of the Late Bronze Age, which had been abandoned for about 150 years, from ca. 1000 to ca. 850 BCE. See: Karageorghis,

the end of each of the three central aisles there are openings leading to the holy of holies. Despite the surprising similarity between the building and the HFL, there is one important things to note: that the building at Kition is a temple rather than a palace.

Ussishkin compares Solomon's palace compound to two palaces at Zingirli: Palace J, built by Kilamuwa around 850-825 BCE, and Palace K, built by Barrakib about a hundred years later (Fig. 9). He also compares it to the palace of Building #1723 uncovered at Megiddo, which he dates to the time of King Solomon, i.e. the mid-tenth century BCE.<sup>44</sup>) He argues that King Solomon's palace conforms to the bit hilani type of building<sup>45</sup>), i.e. a type of palace design originating from northern Syria, that was common to royal palaces throughout the Near East during the Iron Age. The term bit hilani is of Hittite origin, and appears in Assyrian documents in reference to palaces whose front included a portico. In Ussishkin's view, King Solomon's palace was inspired by that model of construction. He does not detail how he reached this conclusion, and comparing his drawing of a *bit hilani* type model (Fig. #2 in his paper)<sup>46</sup>) with the biblical description of the palace compound in Jerusalem, it is difficult to see why he should think so: with the exception of the main ceremonial hall at the centre of the bit hilani palace (which he thinks corresponds to the Throne Room in King Solomon's palace), it is impossible to find any correlation between the two complexes. What perhaps caught Ussishkin's eye was the portico at the entrance of the *bit hilani* palaces, <sup>47</sup>) which features only three columns, in contrast to the many columns at the HFL and the PoP. Fritz, too, rejects the notion that Solomon's palace was of the bit hilani type, since that type of design did not extend to the southern Levant. 48)

The difficulties arising from Ussishkin's hypothesis are: a) He ignores the HFL, the first and largest building in Solomon's palace compound. Ussishkin sees the HFL as a separate, discrete, entity, since it is called a 'house' rather than a 'hall', although it forms part of a contiguous description of the palace compound as a whole, and despite the obvious link between its dimensions and that of the PoP; b) The PoP was-fairly large: while we do not know how many columns it contained, its name suggests that it had many of them. Ussishkin compares it to the entrance hall K1 at Barrakib's palace, which had only three columns; to hall J1 at Kilamuwa, which had none at all; to the entrance hall H at the 1723 palace at Megiddo, with only two. In all three instances the space in question is not large, but more of a vestibule. c) Ussishkin sees a parallel between the ratio between the length and width of the hall: at Kilamuwa, this ratio is 5:2.5, which, while admittedly close to the 5 to 3 ratio of the biblical PoP, is about a tenth of its size. Finally, d) Ussishkin admits that both palaces of Zingirli date from a later period,

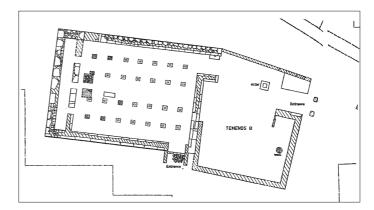


Fig. 8: The Ashtoreth temple at Kition, Cyprus (from: Karageorghis, *Kition. Mycenaean and Phoenician Discoveries in Cyprus*, p. 118).

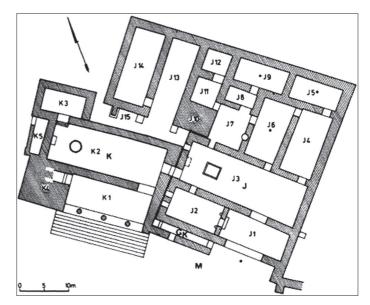


Fig. 9: Plan of the Kilamuwa (J) and Barrakib (K) palaces at Zingirli, typical of the *bit hilani* design (from: Ussishkin, *Solomon's Temple* 1, p. 177).

so that they certainly could not have served as inspiration for Solomon's palace. As for Building #1723 at Megiddo, while Ussishkin may have demonstrated that it is of a *bit hilani* type, he fails to show a convincing relationship between it and Solomon's palace in Jerusalem.

Two of Ussishkin's earlier statements about King Solomon's palace compound are acceptable:

- 1. The palace compound included the other buildings; namely the 'porch of pillars', the Throne Room, the second court, the king's house and the house of Pharaoh's daughter, and the Great Court (albeit I disagree with Ussishkin's contention that the HFL is not part of this complex, but a separate building in its own right).
- 2. The layout of the buildings in the biblical description is given in the order of the buildings appearance from the entrance inwards.

V., Kition. Mycenaean and Phoenician Discoveries in Cyprus, London, 1976, p 117.

<sup>44)</sup> Ussishkin, D., 'King Solomon's Palace', 97.

<sup>45)</sup> For a good definition of the bit hilani pattern, see Frankfort, H., The Art and Architecture of the Ancient Orient, New Heaven, 1996, p. 167.

<sup>&</sup>lt;sup>46</sup>) Ussishkin, ibid., 177, Fig. 19. Cf. Cogan, ibid., p. 257

<sup>&</sup>lt;sup>47</sup>) For more on the *bit hilani* tradition, see Lehmann, G., & Killebrew, A. E., 'Palace 6000 at Megiddo in Context: Iron Age Central Hall Tetra-Partite Residencies and the Bit Hilani Building Tradition in the Levant', *BASOR* 359 (2010), pp. 13–33 (esp. 24–27), and references therein

<sup>&</sup>lt;sup>48</sup>) Fritz, Tempel und Zelt, 78.

Ussishkin's proposal ignores the connection between the HFL and the other buildings: if such a link is established, his proposal is called into question.<sup>49</sup>)

In summary, in the architecture of the northern temples and palaces of Mesopotamia, Syria, Anatolia, Phoenicia and Canaan there are no halls of columns similar to those of the 'house of the forest of Lebanon', or the 'porch of pillars' at King Solomon's palace compound. As Kitchen points out, inasmuch as parallels as do exist in northern buildings mentioned earlier (Kition, Boghazköy), they appear to be of Phoenician influence, which in turn was derived from Egypt.<sup>50</sup>)

The initial tendency – to look to the north – for parallels appears therefore to be misplaced, and a more useful comparison might be gained if one changed direction and examined the less familiar possibility that King Solomon's palace was modelled after Egyptian precedents.

#### 4. Halls of columns in Egyptian temples and palaces

In §1 above we noted several researchers who saw Egyptian influence in King Solomon's palace compound. The first researcher to notice this was the biblical scholar Otto Thenius, who compared King Solomon's palace with the temple of Ramesses III at Medinet Habu. This view is shared by Busink and others.

One of the leading researchers who looked to Egypt for parallels with Solomon's palace was Paulo Matthiae. <sup>51</sup>) In his study he spoke at length about the three first buildings that Solomon built in the palace compound, and compared them to the Egyptian palaces of the New Kingdom. As he saw it, the buildings were built with the help of Phoenician advisors and architects as a single complex architecturally similar to the palaces of Egyptian kings. However the order of the construction does not match the order of their appearance in the text. According to Matthiae's proposal, the PoP (I Kings 7:6) was the entrance hall to the HFL (which had four rows of 15 columns, creating five aisles), and the Throne Room beyond at the far end. This suggestion, which applies also to comparisons with temples in northern countries, raises several difficulties:

- 1. There is no reason to question the order in which the biblical account describes the buildings, and to suggest that the description of the PoP be brought forward in the text, so that it might be understood as the entrance hall to the HFL. He erroneously bases this idea on I Kings 6:3, where indeed the 'porch' precedes the great hall, but there is clear that there what is meant is indeed a vestibule and not a hall of columns.<sup>52</sup>)
- 2. In his reconstruction of the HFL, he states that there were four rows of 15 columns each, making a total of 60 columns and five aisles. As we noted earlier, the number fifteen is based on a misunderstanding of the Hebrew word *safun* ('covered' 7:3), which is how he reaches the exaggerated number of sixty columns.<sup>53</sup>)

3. He makes no reference to the other buildings that Solomon built in the palace compound, i.e., 'his own house' and the house of Pharaoh's daughter, and the courtyard separating them and the great court encompassing the entire compound.

Nonetheless, Matthiae argues that when one examines palaces and mortuary temples in Egypt under the New Kingdom, it is possible to discern a typical structure, with four main sections:<sup>54</sup>)

It is characterized by the presence of a porch, followed by a columned hall with four rows of columns, which precedes the throne hall.<sup>55</sup>)

This distinctive layout of palaces in Egypt under the New Kingdom persisted for centuries to come. As Matthiae points out:

That this typology, moreover, was not reserved only for the palatial quarters of the funerary complexes at Thebes, but was used, probably with a greater freedom than one might imagine, also for the purely residential Pharaonic buildings of representance, and also outside the Theban milieu, is proved by Merenptah's palace at Memphis".<sup>56</sup>)

#### And further:

It is quite probable that the royal palaces of Lower Egypt in the later Ramesside age, and those of the Libyan Pharaos of the 11<sup>th</sup> and 10<sup>th</sup> centuries BC repeated with some variants these Theban and Memphite patterns of the end of the 18th and specially of the 19<sup>th</sup> dynasties.<sup>57</sup>)

Matthiae, however, did not pursue this line of inquiry as far it can go. A more thorough examination of the palaces of Egyptian kings, as presented below, reveals striking parallels with Solomon's palace compound, that extend well beyond the three buildings presented by Matthiae.

#### 5. The palaces in Egypt

There are comparatively few studies of Egyptian palaces in relation to those about Egyptian temples. The primary reason is far fewer palaces have survived, since they were usually constructed of perishable materials, such as clay bricks, while the temples were built of stone (such as limestone).<sup>58</sup>) Another reason is that most of the excavations of palaces have not been published. However, there is still much to be learned from the little information that has been gleaned to

<sup>&</sup>lt;sup>49</sup>) Kitchen, K., 'The Tabernacle: A Bronze Age Artefact', El 24 (1993), p. 128.

<sup>&</sup>lt;sup>50</sup>) Ibid.

<sup>51)</sup> Matthiae, 'Solomon's Palace', 117–130.

<sup>&</sup>lt;sup>52</sup>) Ibid., 120.

<sup>&</sup>lt;sup>53</sup>) See note 16 and §2 above, on the meaning of the Hebrew word *safun*.

<sup>54)</sup> Prominent examples are the palaces of the Mortuary Temples: the Ramesseum, two palaces of Ramesses III, Medinet Habu, Merenptah's palace at Memphis, and the palace of Amenhotep III at Malkata. However, in Matthiae's view, it is clear that the royal palaces of lower Egypt in the Ramesside period, and later during the Libyan dynasties of the eleventh century and tenth centuries BC, continued the tradition of palace construction that dated back to their predecessors of the eighteenth and nineteenth centuries BCE. The Pharaohs based at Pi-Ramesses and Zoan maintained close ties with Asiatic peoples – beyond mere diplomatic and trade relations – who in turn learned and absorbed many Egyptian architectural influences.

<sup>&</sup>lt;sup>55</sup>) Ibid., 126.

<sup>&</sup>lt;sup>56</sup>) Ibid.

<sup>57)</sup> Ibid.

<sup>58)</sup> Jan Assmann points out that construction in plaster represented the transient, while stone represented eternity. See: Assmann, J., Stein und Zeit. Mensch und Gesellschaft im Alten Ägypten, München, 1991, pp. 17–19, and cf. Dietrich Wildung, who believes that the use of perishable plaster attests to the low value that the ancient Egyptians attributed to residential accommodation. See: Wildung, D., 'Lehmbau in Altägypten', in: Architektur der Vergänglichkeit Lehm-bauten der Dritten Welt, ed. Wichmann H., Basel, 1983, pp. 27-53.

date about the design and construction of palaces and how they related to religious symbols.<sup>59</sup>) Palaces served not only for administration and residential purposes, but occasionally also had cosmic and practical functions that enhanced the king's special status both as a god, and as a political and military ruler.<sup>60</sup>)

In the following paragraphs, we explore the hypothesis that parallels for the HFL and the palace compound as a whole should be sought in Egypt, rather than in the northern countries of the ancient Near East.

Peter Lacovara points out that the palaces of ancient Egypt were entirely different from their counterparts in the ancient Near East. <sup>61</sup>) As we shall see, the Egyptian palaces, particularly those of the New Kingdom period, were designed similarly to Solomon's palace compound. <sup>62</sup>) The palace of Merneptah at Memphis is a good example, as it is better preserved than other palaces, so it can be used as a key to understanding the design of palaces during the New Kingdom. However, there are many other well-known palaces, especially in Thebes, most dating to the eighteenth and nineteenth dynasties. Some were for residential purposes, others were used as summer residences, still others were for administrative, or ceremonial and ritual purposes. There is no clear division of palaces according to their functions, and the general view is that some could be ascribed to one or more of these categories.

The best preserved findings in the excavations of palaces were found at the palace of Amenhotep III at Malkata, and that of Merenptah at Memphis. They have much in common, although the palace at Malkata is bigger. The most obvious difference is in the function they fulfilled: Merenptah's palace served for ceremonial and administrative purposes (according to o'Connors interpretation),<sup>63</sup>) while the one at Malkata was for residential purposes.

#### 5.1 Amenhotep's Palace at Malkata

Amenhotep's Palace at Malkata (Fig. 10) served as a residential palace for the king and his family. Its inner section (highlighted in yellow in the illustration below) comprised two halls on a central axis, at the southern end of which was the Throne Room. It covered an area of approximately 125  $\times$  50 meters (including all side rooms). The king's apartment was situated behind the throne, and included a bedroom and bathroom. At the northern end there were three open courtyards. The entire compound was surrounded by a wall with many storage rooms. The central hall featured sixteen

<sup>63</sup>) O'Connor, 'Mirror of the Cosmos', 172 ff.

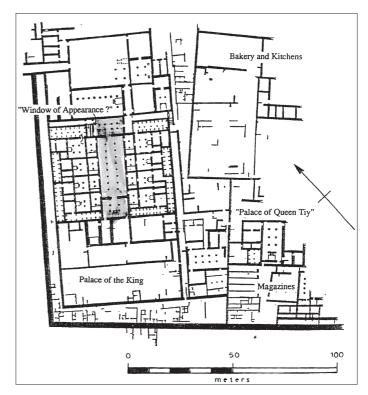


Fig. 10: Amenhotep's palace at Malkata (from: Lacovara, *The New Kingdom Royal City*, p. 114).

columns in two rows: these were made of wood, with stone bases and lotus capitals. The interior of the building is very similar to that described in the palace buildings of Solomon in Jerusalem. The palace of Queen Tiy (the king's first wife) adjoins the king's palace and stands parallel to it to the east.

#### 5.2 Merenptah's Palace at Memphis

Merenptah's Palace at Memphis (Fig. 11) is very similar to Amenhotep's Palace at Malkata, except that instead of a large residential quarters for the king and queen at the back, it contained only a small private apartment for the king. For this reason, O'Connor concluded that it served primarily for administrative/ceremonial purposes rather than as a residence. Nonetheless, the king's apartment served his essential needs, including a bedroom, dressing room and bathroom. The entrance to the palace was through a huge courtyard surrounded by many columns. From it, one entered a large hall with twelve columns, followed by another, small, pillared antechamber attached to the Throne Room. The entire palace is surrounded by a wall.

Despite its different function from the palace at Malkata (according to O'Connor), it follows the same design logic, and is very reminiscent of the description of Solomon's palace in Jerusalem.

### 5.3 Palaces at the Mortuary Temples<sup>64</sup>)

Designs similar to that of the residential and ceremonial palaces can be seen in the mortuary temple palaces of the

<sup>&</sup>lt;sup>59</sup>) Stadelmann, R., 'Tempelpalast und Erscheinungsfenster in Thebanischen Toten-tempeln', *MDAIK* 29, (1973), pp. 314.

<sup>&</sup>lt;sup>60</sup>) O'Connor, D., 'Mirror of the Cosmos: The Palace of Merenptah', in: Fragments of A Shattered Visage: The Proceedings of the International Symposium of Ramesses the Great, eds. Blieberg, E. and Freed, R., Tennessee, 1991.

<sup>61)</sup> Lacovara, P., *The New Kingdom Royal City*, London and New York, 1997, p. 40.

<sup>62)</sup> See Kitchen, 'The Tabernacle', 128. At least four palaces were uncovered at El-Amarna, for example: Akhenaton built a huge palace in his capital city, Akhetaten (El-Amarna). At its southern end was a huge hall of columns with 527 columns, and next to it six smaller halls of pillars, four to the north and two to the south. Kitchen notes the surprising similarity between one of the halls of this complex and the description of Solomon's 'house of the forest of Lebanon'. Lacovara demonstrates that these palaces were still built based on the same designs mentioned earlier, despite the theological changes that occurred in the region during the intervening period. See Lacovara, *New Kingdom Royal City*, 29–32.

<sup>&</sup>lt;sup>64</sup>) Reiner Stadelmann believed that, with the exception of the second palace at Medinet Habu that was apparently converted into a residential

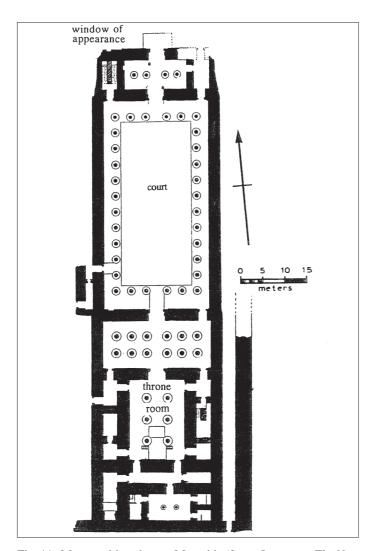


Fig. 11: Merenptah's palace at Memphis (from: Lacovara, *The New Kingdom Royal City*, p. 116).

kings of the New Kingdom, such as the palaces of Merenptah's mortuary temple at Korna<sup>65</sup>; of Seti I; of Ramesses II (the Ramesseum); and of Ramesses III at Medinet Habu (Fig. 12).<sup>66</sup>)

Lacovara concludes his study by stating that there was a standard template for the design of royal palaces, which consisted of the following components: a wall surrounding the

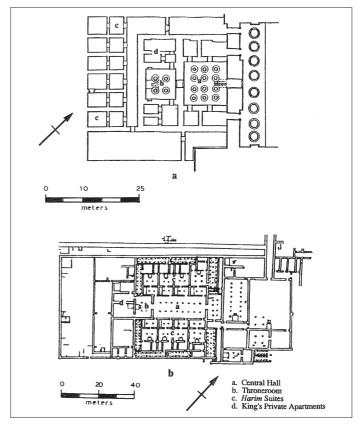


Fig. 12: Comparison between the temple palace of Ramesses III at Medinet Habu and Merenptah's palace at Memphis (from Lacovara, *The New Kingdom Royal City*, p. 122).

compound; entry along a symmetrical axis that ran the length of the building; a hall of columns, or a series of these; a central hall or Throne Room; royal apartments, including a bedroom, bathroom and toilet, and possibly other private rooms.<sup>67</sup>)

Although, comparatively few palaces of the first millennium BCE have been uncovered, there is a considerable amount of material from the excavations at Gebel Barakal in Nubia, which gives an idea about the design of palaces of that period, and demonstrates that the Nubians preserved the Egyptian design tradition, from which one might infer about construction in Egypt itself.<sup>68</sup>) As Kendall points out: 'Overall, this plan offers an even greater similarity to the Egyptian palaces than is apparent in stratum 2'.

While there are no published findings about Egyptian palaces from the time of Solomon, i.e. the tenth century BCE, palace design originating in the eighteenth dynasty appears to have been preserved and continued throughout the New Kingdom period and beyond.

palace during the 22<sup>nd</sup> Dynasty, all the other palaces at the mortuary temples were for symbolic purposes: the rooms were small and not suited for residential purposes; they contained no drainage channels or kitchen; and some even had a false door on the wall behind the throne (e.g. Palace 1, Medinet Habu) – indicating that the palace was meant to serve the king buried in the Valley of the Kings, after his death, rather than as accommodations for a living king – as befitting a mortuary temple. Stadelmann, R., 'Tempelpalast und Erscheinungsfenster in Thebanischen Toten-tempeln', *MDAIK* 29, (1973), p. 228.

<sup>65)</sup> This is of a nearly identical design to that of Merenptah's palace at Memphis. See: Jaritz, H., 'Temple Palace and Residential Palace', in: *Haus und Palast im Alten Ägypten, Internationales Symposium 8*, 11 April 1992, Cairo, Bietak, M., (ed.), Wien, 1996, p. 102.

<sup>&</sup>lt;sup>66</sup>) For detailed descriptions of these palaces, see Lacovara, *New Kingdom Royal City*, 33 & Figs. 29, 30.

<sup>&</sup>lt;sup>67</sup>) Lacovara, New Kingdom Royal City, 35.

<sup>&</sup>lt;sup>68</sup>) The palace of Apries (589-570 BCE) at Memphis is very similar to that of Merenptah; see Baines, J., 'Palaces and Temples of Ancient Egypt', in: *Civilizations of the Ancient Near East*, vol. 1, Sasson, J. M. (ed.), New York, 1995, p. 315.

# 6. The modelling of Egyptian palaces after Egyptian temples

Further indication that the design of Egyptian palaces persisted long after the New Kingdom period (i.e., after ca. 1150 BCE) is the fact that their design resembled that of the temples, for which we do have continuous evidence until as late as the Ptolemaic period (332-30 BCE), when temples such as that of Edfu Dandara exhibit the same pattern of a hall of columns at the entrance, followed by the holy of holies.

Halls of columns appear in all temples built in Egypt from the New Kingdom period onwards. In general, in each case two such halls were built as an integral part of the temple, through which one proceeded to the hall and the holy of holies. Research has revealed that halls of this sort appeared not only in temples but in palaces, since several Egyptian kings used to build their palaces and temples on an identical template.

So far, we have seen that in all types of temples the same building design was preserved. We shall now see that this typical design, featuring several halls of columns leading to the holy of holies, was also apparent in the palaces.

Both O'Connor and Lacovara noted this similarity. Lacovara wrote:

In both design and decoration, the house of the king corresponded to the house of the god. Massive enclosures, the central series of columned halls and courts fronting the smaller, restricted inner chambers are common to both cult temples and residential palaces. <sup>69</sup>)

He also points out that in the palace, as in the temple, the rooms were likely increasingly more exclusive and private, the further one went into the interior sections of the building.<sup>70</sup>)

Merenptah's palace at Memphis is most striking example of a palace built on a temple pattern, as evident from a side-by-side comparison illustration drawn up by Dieter Arnold (Fig. 13):<sup>71</sup>)

This illustration clearly shows the common features in the architectural design of the temple and the palace, and makes it possible to see how closely they correlate to each other. Both feature two halls of columns on the axis route through the building to the king's Throne Room or the god's reception hall, respectively. The innermost hall is the king's quarters (in the palace) or the holy of holies (in the temple).

## Solomon's palace based on the Egyptian temple/palace design

According to the biblical account, Solomon's palace compound contained spaces for state administration purposes: the judgement hall, the king's residence and that of the queen, Pharaoh's daughter. It is unclear what purpose the HFL and PoP served, however, while halls of columns are absent in virtually all northern royal palaces, temples or related buildings, they are very common in the architecture of temples and palaces of ancient Egypt.



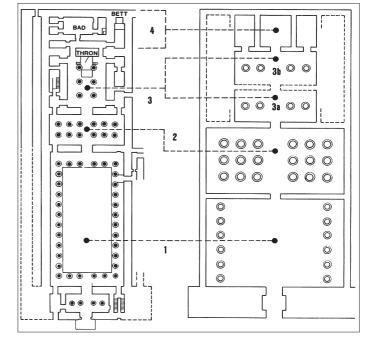


Fig. 13: Comparison between temple and palace (Merenptah's palace at Memphis) (from: Arnold, *Temples of the Last Pharaohs*, New York, 1999, p. 22).

As we saw earlier, the buildings in the palace compound were built as a single complex. In addition, as we have seen, the four buildings described in I Kings 7:2-8 have many parallels with Merenptah's Palace, which was patterned on the Temple of Karnak.<sup>72</sup>) The order of appearance of the buildings in the biblical text also echoes that of Merenptah's Palace: the 'house of the forest of Lebanon' (vv 7:2-5), corresponding to Area 2 at Merenptah's Palace (Fig. 13), and great colonnade at the Temple of Karnak; the 'porch of pillars' to the second, smaller, hall of columns at Merenptah's Palace. King Solomon's Throne Room ('even the porch of judgment' - 7:7) parallels that of Merenptah and the god's reception hall at the Karnak; and the final two buildings define the king's residence and that of Pharaoh's daughter (7:8), which correspond to the bedroom at the end of Merenptah's Palace.<sup>73</sup>)

<sup>&</sup>lt;sup>69</sup>) Lacovara, P., *The New Kingdom Royal City*, London and New York, 1997, 35.

<sup>&</sup>lt;sup>70</sup>) Lacovara, *New Kingdom Royal City*, 36. Cf. O'Connor, 'Mirror of the Cosmos', 182.

<sup>&</sup>lt;sup>71</sup>) With thanks to Dr. Yossi Mizrahi of the University of Haifa for alerting me to this comparison.

<sup>&</sup>lt;sup>72</sup>) According to Dieter Arnold, only in the New Kingdom period did the practice begin of designing palaces based on the design of the temples. See Arnold, *Temples of the Last Pharaohs*, 22.

<sup>&</sup>lt;sup>73</sup>) That said, the residential quarters at this palace were very modest, given that the palace served a predominantly ceremonial and ritual role. A more fitting comparison would be with the palace of Amenhotep III at Malkata, which did fulfill a residential function.

The comparison may be illustrated in the following table:

Merenptah's Palace at Karnak	Merenptah's Palace at Memphis	Palace compound in Jerusalem
First hall of columns	Large hall of columns	The 'house of the forest of Lebanon' (I Kings 7:2-5)
Small hall of columns Altar Room	Small hall of columns situated before the Throne Room	The 'porch of pillars' (I Kings 7:6)
Gods Hospitality Hall	Throne Room	Throne Room ('where he might judge')
Holy of Holies	King's bedroom chamber	King's 'own house' and 'house of Pharaoh's daughter' (I Kings 7:8)
Great Court	Great Court	Great Court

#### 8. Architecture and mathematics

Several studies have found that the ancient Egyptians made extensive use of geometry in the design of public buildings, sculptures, obelisks, pyramids, etc.<sup>74</sup>) This was done not only for construction purposes, but also to create a harmonious effect – i.e. to bring together the parts into a whole.<sup>75</sup>) The most common geometric form was the triangle, and in particular, three types of triangle: a right-angled triangle whose sides were of the ratio 3:4:5 (the 'sacred triangle', according to Vincent); the equilateral triangle, and an isosceles triangle with a height-base ratio of 8:5 (the 'Osiris Triangle', according to Vincent).<sup>76</sup>)

In the verses related to the construction of Solomon's palace compound, we are given the dimensions of only two buildings: the HFL ( $30 \times 50 \times 100$  cubits), and the PoP ( $30 \times 50$ ). Significantly, these dimensions indicate the use of an 8:5 triangle: the ratio between the height of the HFL (30 cubits) to its width (50 cubits) is similar to that of its width to its length. The height of the PoP is not given, presumably because, as the extension of the HFL, its height was the same (30 cubits). Therefore, its length-to-height ratio is also 8:5...

The dimensions of the HFL might also be seen as reflecting the harmony arising from the 'sacred triangle's 3:4:5

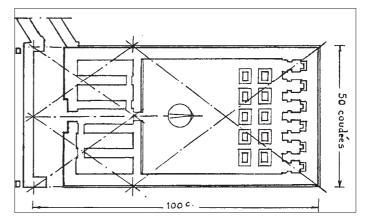


Fig. 14: Plan of the temple of Snefru at Dahshur, based on the 3:4:5 right-angled triangle (from: Lauer, 'Le triangle sacré', p. 61).

ratio: if we divide its area into three equal parts, the resulting one third and two-thirds rectangles each consist of two right-angle triangles of such a ratio. Jean-Phillipe Lauer<sup>78</sup>) has shown that the Temple of Snefru (2575-2551 BCE) in Dahshur was built on such a triangle, and significantly, its dimensions are identical to those of the HFL (Fig. 14).<sup>79</sup>)

### 9. Pharaoh's daughter: the King's first wife

More than any other Israelite king, Solomon was known for forging diplomatic alliances through marriage. 80) We are told that he built a special house for Pharaoh's daughter in the palace compound (I Kings 7:9), and yet the very question of whether in fact Solomon did marry a daughter of Pharaoh is still a matter of dispute among researchers.<sup>81</sup>) Those that deny that the account has any historical veracity base their argument on a letter written by Amenhotep III (1390-1353 BCE), approximately four hundred years before Solomon's time, in which he notes that an Egyptian princess had never been given in marriage to a foreigner. However, during the Third Intermediate Period corresponding to Solomon's reign, Egypt was ruled by a Libyan dynasty, and Egypt was not quite as powerful as it had been at the height of the New Kingdom.<sup>82</sup>) Conversely, those who do believe that the biblical account is historically true point to the fact that Pharaoh's daughter is mentioned no fewer than five times in the Hebrew Bible, 83) and that she is the only one of Solomon's thousand

<sup>&</sup>lt;sup>74</sup>) Vincent, L. H., Jerusalem de l'Ancien Testament, recherches d'archeologie et d'histoire, Paris, 1956; Badawy, A., Ancient Egyptian Architectural Design: A Study of the Harmonic System, Near Eastern Studies 4, Berkeley, 1965; Rossi, C., Architecture and Mathematics in Ancient Egypt, Cambridge, 2004.

<sup>&</sup>lt;sup>75</sup>) The French architect Viollet-le-Duc argued in 1863 that design in ancient Egypt was harmonic, but we can assume that mathematics known to the ancient Egyptians of that period was different from the mathematics of today, so the models presented in the studies are not necessarily identical to the ancient models. See Viollet-le-Duc, E., *Lectures on Architecture* (*Entretiens sur l'architecture*, Paris 1863), English trans. by Bucknall, B., New York, 1987.

<sup>&</sup>lt;sup>76</sup>) Viollet-le-Duc referred to this triangle simply as 'Egyptian', however Badawy refers to it as the '8:5 triangle,' and Vincent called it 'the sacred triangle'. Viollet-le-Duc appears to have been the first to study the geometry of ancient Egypt, and suggested that these three triangles were the foundation of Egyptian architecture.

 $<sup>^{77}</sup>$ ) The equivalence is approximate, of course, since 3/5 = 0.6, while 5/8 = 0.625: number were rounded to the nearest whole cubit.

<sup>&</sup>lt;sup>78</sup>) Lauer, J. P., 'Le triangle sacré dans les plans des monuments de l'Ancient Empire', *BIFAO* 77, (1977), pp. 55-78.

<sup>&</sup>lt;sup>79</sup>) See Rossi, C., Architecture and Mathematics in Ancient Egypt, Cambridge, 2004.

<sup>&</sup>lt;sup>80</sup>) I Kings 11:1, which notes several foreign princesses from Moab, Ammon, and Edom. According to the Septuagint, from Aram, see: Malamat, A., *Israel in the Biblical Period*, p. 208 note 40 (Hebrew).

<sup>&</sup>lt;sup>81</sup>) See Kitchen, [...] p. 108, who suggests she is the daughter of Pharaoh Siamun (978-959 BCE) of the 21<sup>st</sup> Dynasty.

<sup>&</sup>lt;sup>82</sup>) Kitchen, ibid. p. 111, Egyptian kings of the 21<sup>st</sup>–23<sup>rd</sup> dynasties married off their daughters for political alliances. Psusennes II (959-949 BC), the last of the 21<sup>st</sup> Dynasty, gave his daughter Maatkara in marriage to Osorkon, the Libyan ruler in the Delta.

<sup>&</sup>lt;sup>83</sup>) I Kings 3:1; 7:8; 9:16, 24; 11:1–2; and II Chron. 8:11 – suggesting that the biblical authors wished to highlight his political marriage to Pharaoh's daughter, without mentioning any other of his thousand wives or concubines (apart from a general reference in I Kings 11:1–2 to his marrying foreign women who 'turned away his heart after other gods'. This supports the speculation that this is a historical account. See Currid, J. D., Ancient Egypt and the Old Testament, Michigan, 1997. Malamat also

wives and concubines who had a residence built just for her. Therefore, they say, it is not surprising that the palace compound, comprising the king's 'own house' and 'the house for Pharaoh's daughter' (v. 8) was modelled on an Egyptian palace.<sup>84</sup>) Both buildings are reported to have emulated the halls: 'which was of the like work. Solomon made also an house for Pharaoh' daughter, whom he had taken to wife, like unto this porch' (ibid.). It follows that they, too, featured colonnaded exedra, like the two preceding halls.

# 10. Millo, a viewing place at the Pharaoh's daughter's palace?

A place by the name of Millo, which according to the biblical text was in Jerusalem (I Kings 9:15, 24; 11:27), is first mentioned in II Sam. 5:9, suggesting that it had been an important site already in David's lifetime. However, this is not the Millo referred to here, since the text says that Solomon built it, and that its construction began only in the twentieth year of his reign, after the house of Pharaoh's daughter, the king's own house and the Temple had been completed (9:24). It further states that it was built when Pharaoh's daughter's moved from the City of David to the new residence that Solomon had built for her.

What, then, is the Millo? The simplest explanation – and the one subscribed to by most commentators – is that its name is derived from the Hebrew root מ.ל.מ m-l-a, meaning 'to fill', or 'fill', suggesting that the Millo is simply a generic term for a fortified wall filled with stone fill, on a hillside. Many believe that it refers to the rock fill on the Ophel's eastern flank. According to II Samuel 5:9, it was a viewing platform in Jerusalem. The Septuagint translated it as khakra, i.e. a fortress.

Little attention has been given to the suggestion made by Manfred Görg, that the word is in fact of Egyptian origin. In Egyptian archaeology we know it as the Egyptian architectural term  $m^3rw$  (pron. maru) meaning an observation point: since there was no L sound in ancient Egyptian, the Semitic L corresponded to R in Egyptian, so the two words are phonetically and semantically similar. Badawy points out that all incidences of the term  $m^3rw$  in Egypt are in texts relate to the cult of the sun, the Queen and her immediate entourage. On the links between  $M^3rw$ -Jtn at Tel-El-Amarna and Amenhotep III's  $m^3rw$ , he says:

The *m3rw* was essentially a religious building, best described as 'viewing place'... It was connected only with solar gods: Amen-Re at Thebes, Aten at El-Amarna or Horus at Denderah, Edfu and Philae. <sup>85</sup>)

According to Görg, the Millo building that Solomon built was not a fortification in the sense of a rock-filled wall as conventionally thought, but a *m3rw* that formed part of the palace garden with a special building reserved for the queen.

contends that this is historically true, and that Israel and Egypt had struck an alliance based on six points (Malamat, *Israel in the Biblical Period*, 184–185). However, other researchers doubt there is any historical substance to the account. See Ash, P. S., *David, Solomon and Egypt: A Reassessment*, Sheffield, 1999.

I believe we should consider the more likely possibility that the word Millo was borrowed from the word Egyptian *mβrw*, with the final guttural consonant being, perhaps, a 'prosthetic aleph.' In that case, the original meaning of the term, which probably originated in a word such as mallu, was a park-like complex, which also involved prominent buildings in the temples complex of Solomon's time – a kind of a miniature version of *M3rw-Jtn* in Jerusalem.<sup>86</sup>)

Görg's suggestion appears to be substantiated in the text in I Kings 9:24, which links Pharaoh's daughter's 'coming up' to the City of David to the construction of the Millo: 'But Pharaoh's daughter came up out of the city of David unto her house which Solomon had built for her: then did he build Millo'

Although we have no more archaeological evidence of *m3rws* in the Third Intermediate Period, we do find the term reappearing in the Ptolemaic period, and in the *Book of the Temple* (whose roots date back to the Middle Kingdom).<sup>87</sup>)

#### 11. Summary and conclusions

The suggestion that the palace compound built by Solomon in Jerusalem was modelled on the designs of Egyptian palaces – which in turn were based on those of Egyptian temples – is based on several arguments:

- 1. The suggestion that Solomon's palace compound emulated the designs of palaces in the northern regions of the Near East, or, as Ussishkin argued, on the *bit hilani* model, must be ruled out: the two large and prominent halls of columns described in the biblical text have no architectural parallel in northern temples.
- 2. We saw in § 2.6, Solomon's palace compound in Jerusalem featured at least thirty- two cedar columns (by my calculation), plus another forty-six columns of bronze, provided by King Hiram of Tyre (per the Septuagint), for a total of at least 78 columns. Such a large number of columns in palaces were found only in ancient Egypt, where buildings similar to that of the 'house of the forest of Lebanon' and 'porch of pillars' are very common amongst the temples and palaces. One could say that almost all the Egyptian temples built from the New Kingdom Dynasty until the late Ptolemaic period featured colonnaded exedra at the entrance to temples – in most cases, in the form of two consecutive halls, one large, one smaller. This typical temple design format was applied to the design of the ancient Egyptian palaces, as well. Most of the palaces of the kings of Egypt have not survived, because they were built of clay bricks, however the few that have been uncovered, particularly those of Merenptah at Memphis and Amenhotep III at Malkata, tell us much about their design. Merentpah's palace was inspired by that of the temple that he built at Karnak, as were many palaces of the 18th and 20th dynasties, and this design tradition persevered even under the Libyan dynasties in the mid-tenth century BCE onwards. Whether they served as permanent residences, summer residences, administration or religious ritual, Egyptian palaces were all built along

M. Fitzenreiter (Hrsg.), Berlin, 2003, pp. 111–123.

<sup>&</sup>lt;sup>84</sup>) In John Olley's literary analysis of I Kings 1-11, the chiastic structure of 6:38–7:12 gives precedence to the king's own house, with key attention to the house of Pharaoh's daughter. See: Olley, W. J., 'Pharaoh's Daughter, Solomon's Palace, and the Temple: Another Look at the Structure of 1 Kings 1–11', *JSOT* 27/3, (2003), pp. 355-369.

<sup>85)</sup> Badawy, 'Maru-Aten', 63.

<sup>86)</sup> Görg, M., 'Maru und Millo', in *GM* 20, Göttingen, 1976, p. 29.
87) According to Joachin Quack, the *Book of the Temple* links the Maru with the place in the temple where the sacred animals were kept. See Quack, J. F., 'Die Rolle des heiligen Tieres nach dem Buch vom Tempel', in: *Tierkulte im pharaonischen Ägypten und im Kulturvergleich*, ed.

identical architectural lines, based on the typical design of an Egyptian temple.

- 3. The biblical author describing the five buildings (I Kings 7:2-12), treats them as a single complex, as suggested and detailed in §7 above. Verse 12 describes all the buildings as being encompassed by a large court ('And the great court round about').
- 4. The order in which the buildings are described in I Kings 7:2-12 closely matches the typical layout of Egyptian palaces or temples, as shown in Table 7 above. Theses parallels are extremely significant and a clear indication of the Egyptian model that the biblical author of I Kings had in mind.
- 5. The dimensions ascribed to the 'house of the forest of Lebanon' are strikingly similar to those of the temple of Snefru in Dahshur, which was designed and built based the 'sacred triangle', and indicate the use of sacred Egyptian mathematics in its design of the building.
- 6. The interpretation suggested above for the phrase 'and the other pillars and the thick beam were before them' (I Kings 7:6b) suggests a domed canopy held aloft by four pillars over the king's throne, a feature customary with Egyptian kings.
- 7. Some scholars believe that King Solomon's throne, based on the description, emulated that of the Egyptian throne: placed on an inclined surface similar in its shape to the hieroglyph of the goddess Maat, goddess of justice and cosmic order.
- 8. Pharaoh's daughter played a key role in Solomon's historiography, being cited no fewer than five times throughout the story, from chapter 3 through chapter 11, and in various contexts most notably the construction of a house for her. The biblical narrator saw her residence as being adjacent to that of the king, as described in I Kings 7:8. Moreover, the two residences were built along similar lines as the 'porch of pillars' and the 'house of the forest of Lebanon' ('which was of the like work [...] like unto this porch'). It is not surprising that the residence of an Egyptian princess should be designed in the manner of her native Egyptian architecture.
- 9. The connection between Pharaoh's daughter and the Millo: if Görg is correct, and the word *Millo* is merely a Hebraized variation of the Egyptian term *m3rw*, the Millo was a part of the palace set aside for the Queen to worship the sun god. This would give a very different meaning to verse I Kings 9:24: 'But Pharaoh's daughter came up out of the city of David unto her house which Solomon had built for her: then did he build Millo', providing a strong association between the construction of the Millo, and Pharaoh's daughter.

# 12. Reconstruction of the buildings layout in the palace compound

In Fig. 1 we saw Otto Thenius's proposed drawing of the layout of Solomon's acropolis. Although the ratio between the dimensions of the Temple and the palace, as depicted in the drawing, is incorrect, he clearly shows the palace buildings as a single unit on an east-west axis (with the entrance to the east, inspired by the layout of the buildings of the Temple of Ramesses III buildings in Medinet Habu). Busink proposed other layouts (Fig. 15), based on that of the buildings on the acropolis at Tel Tainat, while Kitchen suggested a layout based on northern palaces (Fig. 16) – particularly

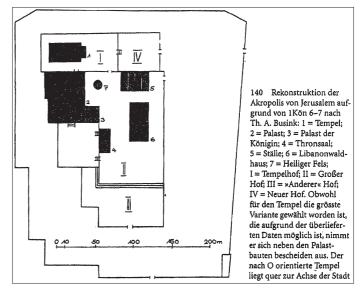


Fig. 15: Busink's proposed reconstruction of the layout of Solomon's palace compound (from: Busink, *Der Tempel von Jerusalem*, p. 160).

the Hittite palace at Boghazköy (dated to 1250 BCE), and that of King Yarim-Lim of the eighteenth century BCE.<sup>88</sup>)

Stade (1887), Benzinger (1927), Galling (1937), and Vincent (1956),<sup>89</sup>) all see the various buildings as discrete, standalone entities – not because of anything in the biblical text, but by inference, on the assumption that they were similar to the palaces adjacent to northern temples.

However, based on all the above, the biblical description points to an association with Egyptian architecture, and that Solomon's palace was likely built based on the design of palaces in ancient Egypt. Accordingly, I propose a different reconstruction of Solomon's palace compound (Fig. 17) that takes into account all five buildings and the two courts cited in I Kings 7:2-12, and based on the following elements:

- 1. The first three buildings the 'house of the forest of Lebanon', the 'porch of pillars' and the Throne Room arranged in order of their appearance, and based on the archaeological evidence of palaces in ancient Egypt.
- 2. The king's own house and house for Pharaoh's daughter, situated side-by-side, with the second court situated between them and the Throne Room. Pharaoh's daughter's house may have been situated behind the king's residence. According to Görg's hypothesis, the Millo would be located at the end of the compound, at the rear of Pharaoh's daughter's house.
- 3. The Great Court encompassed the entire palace compound and ran adjacent to that of the Temple.
- 4. As for the location of the palace compound in relation to the Temple, it is commonly thought that the Temple was situated north of the compound, and at a higher level.<sup>90</sup>)

<sup>&</sup>lt;sup>88</sup>) Kitchen, *On the Reliability of the Old Testament*, Cambridge, 2003, p. 130, and Figs. 20b, 20d on pp. 620–621. See footnote there with references to discussions on the *bit hilani* design model.

<sup>&</sup>lt;sup>89</sup>) Busink, T. A., *Der Tempel*, 143, 148.
<sup>90</sup>) That the Temple sat higher than the palace compound is evident from several sources (I Kings 11:20, 12:11; 22:4; Jeremiah 26:10, 12; 36:11–12), which mention that one ascends from the palace, or descends from the Temple.

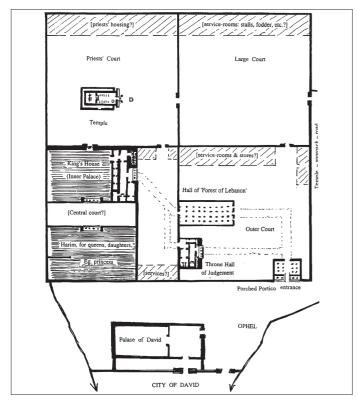


Fig. 16: Kitchen's proposed reconstruction of the layout of Solomon's palace compound (from: Kitchen, *On the Reliability of the Old Testament*, Cambridge, 2003, p. 622, Fig. 21).

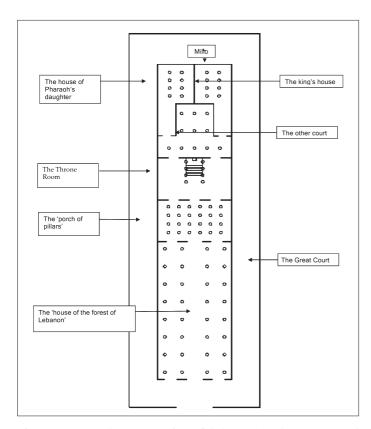


Fig. 17: Proposed reconstruction of Solomon's palace compound in Jerusalem.

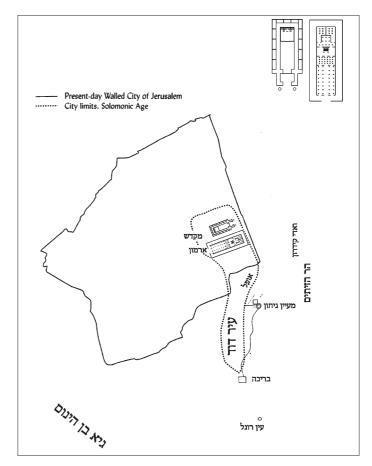


Fig. 18: Proposed layout of the buildings on the mountain.

With regard to the orientation of the compound, there are two possibilities: it was either east-west (with the entrance was from the east, like that of the Temple), or west- east (with the entrance was from the west). In the latter case, the Millo was situated at the eastern end, to provide a vantage point over Mount Olives and the sunrise (Fig. 17).

#### Conclusion

The conclusion of the above discussion is that there are similarities between the Solomon's palace, as described in I Kings 7:2-12, and the building designs of palaces and temples in ancient Egypt. Whether this influence was direct or indirect (e.g., by way of the Phoenicians), it seems clear that the biblical author, who dwells on the Solomon's marriage to Pharaoh's daughter, saw the presence of Pharaoh's daughter in Jerusalem as the main reason for the construction of the complex along Egyptian lines: as he saw it, Egyptian engineers and architects and perhaps even construction workers, designed the building complex, and supervised its construction. The presence of Egyptian construction professionals at the construction site even makes it very likely that Egyptian influence also extended to the construction of the Temple and possibly its finishes and ritual paraphernalia.